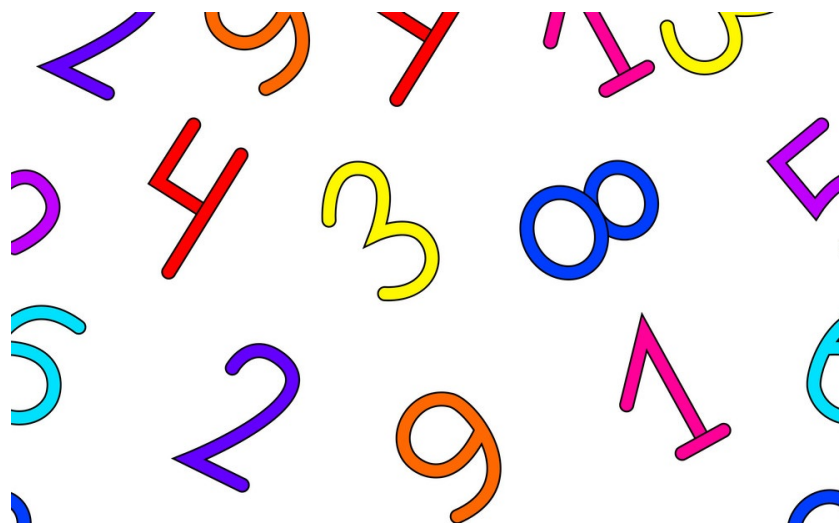# Michigan Epsilon Chapter of Pi Mu Epsilon

Problem of the Fortnight

You have three colors and you would like to color every integer in such a way that x and y always get a different color whenever $x - y$ is a nonzero perfect square. Is such a coloring possible?

Please turn in your solutions to Dr. Patrick Bennett, by noon on **Friday April 5 2019**. Strive for clarity, neatness and legibility! Solutions may be turned into the Math Dept office in **3319 Everett Tower**. Please include your name and email address. Electronic submissions may be sent to **patrick.bennett@wmich.edu**. If you are currently taking a math class, please include the instructor's name and the course number.

http://www.wmich.edu/mathclub